

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. – 22. (Cancelled)

23. (Currently Amended) A system for monitoring data flow in a web application hosted on a server, comprising:

a data collector configured to:

collect information about a HTTP request when a first hook is triggered in the server while the server is servicing the HTTP request and to return control to the server once information about the HTTP request has been collected, and

collect information about a HTTP response generated by the server in response to the HTTP request when a second hook in the server is triggered while servicing the HTTP request and to return control to the server once information about the HTTP response has been collected ~~which intercepts a transaction, wherein intercepting the transaction comprises intercepting a HTTP request sent by the client to the server and a corresponding HTTP response sent by the server to the client in order to collect data passed between components of the web application corresponding to the transaction; and~~

a graphical display which displays the information about the HTTP request and information about the HTTP response collected data,

~~wherein the data collector comprises a process which uses hooks to intercept the HTTP request and the HTTP response in order to collect data,~~

~~wherein the hooks are embedded in at least one selected from the group consisting of the server and a server plug-in application configured to execute on the server, and~~

~~wherein the collected data comprises at least session data associated with the transaction~~

wherein each of the first hook and the second hook is embedded in at least one selected from the group consisting of the server and a server plug-in application configured to execute on the server,

wherein the server is configured to process the HTTP request to generate the HTTP response, and

wherein the first hook is triggered in at least one selected from the group consisting of the server and the server plug-in application prior to generating the HTTP response and the second hook is triggered in at least one selected from the group consisting of the server and the server plug-in after generating the HTTP response.

24. (Currently Amended) The system of claim 23, wherein the information about the HTTP request and the information about the HTTP response ~~collected data~~ further comprises one selected from the group consisting of data contained in the HTTP request, data contained in the HTTP response, properties of a dynamic component invoked by the server to process the HTTP request, data contained in a cookie associated with the HTTP request, data contained in a cookie associated with the HTTP response, and combinations thereof.
25. (Currently Amended) The system of claim 24, wherein the information about the HTTP request ~~collected data~~ further comprises properties of a HTTP session associated with the HTTP request.
26. (Cancelled)
27. (Cancelled)
28. (Currently Amended) The system of claim 23, further comprising a directory for storing the information about the HTTP request and the information about the HTTP response ~~collected data~~ on a per-transaction basis.
29. (Currently Amended) The system of claim 28, further comprising means for retrieving the information about the HTTP request and the information about the HTTP response ~~data~~ stored in the directory and for updating the graphical display with the information about the HTTP request and the information about the HTTP response ~~data~~.
30. (Currently Amended) The system of claim 29, further comprising means for deleting the information about the HTTP request and the information about the HTTP response ~~data~~ associated with a selected HTTP request from the directory.

31. (Currently Amended) A system for monitoring data flow in a web application, comprising:

a server which hosts the web application servicing a HTTP request from a client, wherein servicing the HTTP request triggers a first hook and a second hook, wherein each of the first hook and the second hook is embedded in at least one selected from the group consisting of the server and a server plug-in application configured to execute on the server, and wherein servicing the HTTP request comprises processing the HTTP request by the server to generate a HTTP response;

a data collector configured to:

collect information about the HTTP request when the first hook is triggered and to return control to the server once the information about the HTTP request has been collected, and

collect information about the HTTP response generated by the server in response to the HTTP request when a second hook is triggered and to return control to the server once the information about the HTTP response has been collected ~~which intercepts a transaction, wherein intercepting the transaction comprises intercepting a HTTP request sent by the client to the server and a corresponding HTTP response sent by the server to the client in order to collect data passed between components of the web application corresponding to the transaction; and~~

an application that provides a graphical display for displaying the information about the HTTP request and the information about the HTTP response collected data,

~~wherein the data collector comprises a process which uses hooks to intercept the HTTP request and the HTTP response in order to collect data,~~

~~wherein the hooks are embedded in at least one selected from the group consisting of the server and a server plug-in application configured to execute on the server, and~~

~~wherein the collected data comprises at least session data associated with the transaction~~

wherein the first hook is triggered in at least one selected from the group consisting of the server and the server plug-in application prior to generating the HTTP response and the second hook is triggered in at least one selected from the group consisting of the server and the server plug-in after generating the HTTP response.

32. (Currently Amended) The system of claim 31, wherein the ~~collected data~~ information about the HTTP request and the information about the HTTP response further comprises one selected from the group consisting of data contained in the HTTP request, data contained in the HTTP response, properties of a dynamic component invoked by the server to process the HTTP request, data contained in a cookie associated with the HTTP request, data contained in a cookie associated with the HTTP response, and combinations thereof.
33. (Currently Amended) The system of claim 32, wherein the ~~collected data~~ information about the HTTP request further comprises properties of a HTTP session associated with the HTTP request.
34. (Cancelled)
35. (Cancelled)
36. (Currently Amended) A system for test-running and debugging a web application, comprising:
- a server which hosts the web application servicing a HTTP request from a client, wherein servicing the HTTP request triggers a first hook and a second hook, wherein each of the first hook and the second hook are embedded in at least one selected from the group consisting of the server and a server plug-in application configured to execute on the server, and wherein servicing the HTTP request comprises processing the HTTP request by the server to generate a HTTP response;
 - [[a]] the client configured to send the HTTP requesting resources from to the server;
 - a data collector configured to:
 - collect information about the HTTP request when the first hook is triggered and to return control to the server once the information about the HTTP request has been collected, and
 - collect information about the HTTP response generated by the server in response to the HTTP request when a second hook is triggered and to return control to the server once the information about the HTTP response has been collected ~~which intercepts a transaction, wherein intercepting the transaction comprises intercepting a HTTP request sent by the client to the~~

~~server and a corresponding HTTP response sent by the server to the client in order to collect data passed between components of the web application corresponding to the transaction; and~~

an application that provides a graphical display for displaying the information about the HTTP request and the information about the HTTP response collected data,
~~wherein the data collector comprises a process which uses hooks to intercept the HTTP request and the HTTP response in order to collect data,~~
~~wherein the hooks are embedded in at least one selected from the group consisting of the server and a server plug-in application configured to execute on the server, and~~
~~wherein the collected data comprises at least session data associated with the transaction~~
wherein the first hook is triggered in at least one selected from the group consisting of the server and the server plug-in application prior to generating the HTTP response and the second hook is triggered in at least one selected from the group consisting of the server and the server plug-in after generating the HTTP response.

37. (Currently Amended) The system of claim 36, wherein the information about the HTTP request and the information about the HTTP response collected data further comprises one selected from the group consisting of data contained in the HTTP request, data contained in the HTTP response, properties of a dynamic component invoked by the server to process the HTTP request, data contained in a cookie associated with the HTTP request, data contained in a cookie associated with the HTTP response, and combinations thereof.
38. (Previously Presented) The system of claim 37, further comprising an integrated development environment which starts the server in a separate process.
39. (Previously Presented) The system of claim 38, wherein the graphical display is accessible from within the integrated development environment.
40. (Previously Presented) The system of claim 38, wherein the client is accessible from within the integrated development environment.

41. (Previously Presented) The system of claim 38, wherein the integrated development environment comprises a mechanism that listens for requests from external processes and updates the graphical display in response to a notification from the data collector.
42. (Currently Amended) The system of claim 37, further comprising a directory for storing the ~~collected data~~ information about the HTTP request and the information about the HTTP response on a per-transaction basis.
43. (Currently Amended) The system of claim 42, further comprising a mechanism running as part of the client which updates the graphical display with the information about the HTTP request and the information about the HTTP response data stored in the directory.
44. (Currently Amended) A system for test-running and debugging a web application, comprising:
- a server which hosts the web application servicing a HTTP request from a client, wherein servicing the HTTP request triggers a first hook and a second hook, wherein each of the first hook and the second hook are embedded in at least one selected from the group consisting of the server and a server plug-in application configured to execute on the server, and wherein servicing the HTTP request comprises processing the HTTP request by the server to generate a HTTP response;
 - an integrated development environment which starts the server in a separate process;
 - [[a]] the client configured to send the HTTP requesting resources from to the server;
 - a data collector configured to:
 - collect information about the HTTP request when the first hook is triggered and to return control to the server once information about the HTTP request has been collected, and
 - collect information about the HTTP response generated by the server in response to the HTTP request when a second hook is triggered and to return control to the server once information about the HTTP response has been collected ~~which intercepts a transaction, wherein intercepting the transaction comprises intercepting a HTTP request sent by the client to the server and a corresponding HTTP response sent by the server to the client~~

~~in order to collect data passed between components of the web application corresponding to the transaction; and~~
an application that provides a graphical display for displaying the information about the HTTP request and information about the HTTP response collected data,
~~wherein the data collector comprises a process which uses hooks to intercept the HTTP request and the HTTP response in order to collect data,~~
~~wherein the hooks are embedded in at least one selected from the group consisting of the server and a server plug-in application configured to execute on the server, and~~
~~wherein the collected data comprises at least session data associated with the transaction~~
wherein the first hook is triggered in at least one selected from the group consisting of the server and the server plug-in application prior to generating the HTTP response and the second hook is triggered in at least one selected from the group consisting of the server and the server plug-in after generating the HTTP response.

45. (Currently Amended) The system of claim 44, wherein the information about the HTTP request and information about the HTTP response collected data further comprises one selected from the group consisting of data contained in the HTTP request, data contained in the HTTP response, properties of a dynamic component invoked by the server to process the HTTP request, data contained in a cookie associated with the HTTP request, data contained in a cookie associated with the HTTP response, and combinations thereof.
46. (Currently Amended) The system of claim 45, wherein the information about the HTTP request collected data further comprises properties of a HTTP session associated with the HTTP request.
47. (Currently Amended) A method for monitoring data flow in a web application, comprising:
sending a HTTP request to a server hosting the web application, wherein the HTTP request is associated with a transaction;
receiving the HTTP request by the server;

triggering a first hook in the server prior to servicing the HTTP request by the server and
after receiving the HTTP request, whereby triggering the first hook transfers
control to a data collector, wherein the data collector is configured to collect
information about the HTTP request when the first hook is triggered and to return
control to the server once information about the HTTP request has been collected;
servicing the HTTP request by the server to generate a HTTP response after control is
returned to the server;
~~receiving a HTTP response from the server, wherein the HTTP response is associated~~
~~with the transaction;~~
triggering a second hook in the server after the HTTP response has been generated,
whereby triggering the second hook transfers control to a data collector, wherein
the data collector is configured to collect information about the HTTP response
when the second hook is triggered and to return control to the server once
information about the HTTP response has been collected; and
forwarding the HTTP response to a client that sent the HTTP request after control is
returned to the server,
~~intercepting the HTTP request and the HTTP response on the server in order to collect~~
~~data passed between components of the web application corresponding to the~~
~~transaction; and~~
~~displaying the collected data on a graphical display,~~
~~wherein the data collector comprises a process which uses hooks to intercept the HTTP~~
~~request and the HTTP response in order to collect data,~~
~~wherein the hooks are embedded in at least one selected from the group consisting of the~~
~~server and a server plug-in application configured to execute on the server, and~~
~~wherein the collected data comprises at least session data associated with the transaction~~
wherein each of the first hook and the second hook are embedded in at least one selected
from the group consisting of the server and a server plug-in application
configured to execute on the server.

48. (Previously Presented) The method of claim 47, wherein the collected data further comprises one selected from the group consisting of data contained in the HTTP request, data contained in the HTTP response, properties of a dynamic component invoked by the

server to process the HTTP request, data contained in a cookie associated with the HTTP request, data contained in a cookie associated with the HTTP response, and combinations thereof.

- 49. (Previously Presented) The method of claim 48, wherein the collected data further comprises properties of a HTTP session associated with the HTTP request.
- 50. (Previously Presented) The method of claim 47, wherein the HTTP request is intercepted prior to the server making any modifications to the HTTP request.
- 51. (Previously Presented) The method of claim 50, wherein the HTTP response is intercepted prior to the server making any modifications to the HTTP response.